



Tobacco Product Waste (TPW) Interventions

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Overview of the Presentation

- Review current mitigation efforts on TPW waste
- Review environmental principles regarding TPW (EPR, PS)
- Case studies on Extended Producer Responsibility
- Describe need for new partnerships



TPW Mitigation Efforts

- Regulatory policies: banning outdoor smoking
- Awareness raising and behavior change among smokers
 - PR Campaigns
 - Social Media
 - Butt cleanups
- Extended Producer Responsibility and the tobacco industry
- Litter fees and other economic interventions

Smoking Bans

- 150 municipalities across the country prohibit smoking on their beaches
- 650 communities prohibit smoking in their parks
- 766 college campuses nationwide (17%) are completely smoke free, others with designated smoking areas and partial bans (all UC and CSU)
- Do these policies work?
- Many California communities now prohibit smoking outdoors—what happens to the butts?

NYC Smoking Ban in Parks and Beaches (2010)

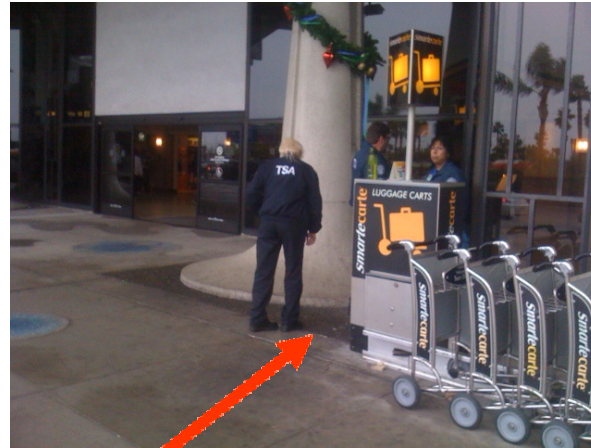
Litter Audit

- TPW on *beaches* in summer 2011 was significantly lower than in summer 2010, ($p < 0.001$);
- No reliable decrease in TPW in *parks*;
- An unexpected decrease in TPW in *playgrounds* from spring to summer 2011.

Changes in Smoking

- *Observational study*:
Prevalence of smoking in parks decreased from 3.3 % of visitors in 2010 to 1.4 % in 2011, ($p < 0.0001$);
- *State tobacco survey*:
noticing people smoking in outdoor areas is constant over two-year period before and after law (baseline for future evaluations).

Clean Indoor Air Policies Increase Urban Butt Waste



Bad aim!

With rain, butts are carried via stormwater directly into harbors, beaches and rivers



Unless Bans are Accompanied by Behavior Change

- Butt cleanups can demonstrate environmental burden and generate interest
- Social media can increase awareness
- PR campaigns by State, Legacy, local agencies
- http://www.plowsharegroup.com/media_downloads/legacyforhealth.php
- <http://www.youtube.com/watch?v=SYdKVMNrqlY&noredirect=1#t=22>
- Evaluate with marketing software (Radian6)

State and National Park Efforts

- SB4 passed both California houses in 2010 and was vetoed by the Governor
- *Healthy Parks, Healthy People* US: NPS initiative to reintegrate human, environmental and ecological health into their mission.
- Rationale
 - De-normalization of smoking
 - Preventing fires
 - Mitigating public nuisance

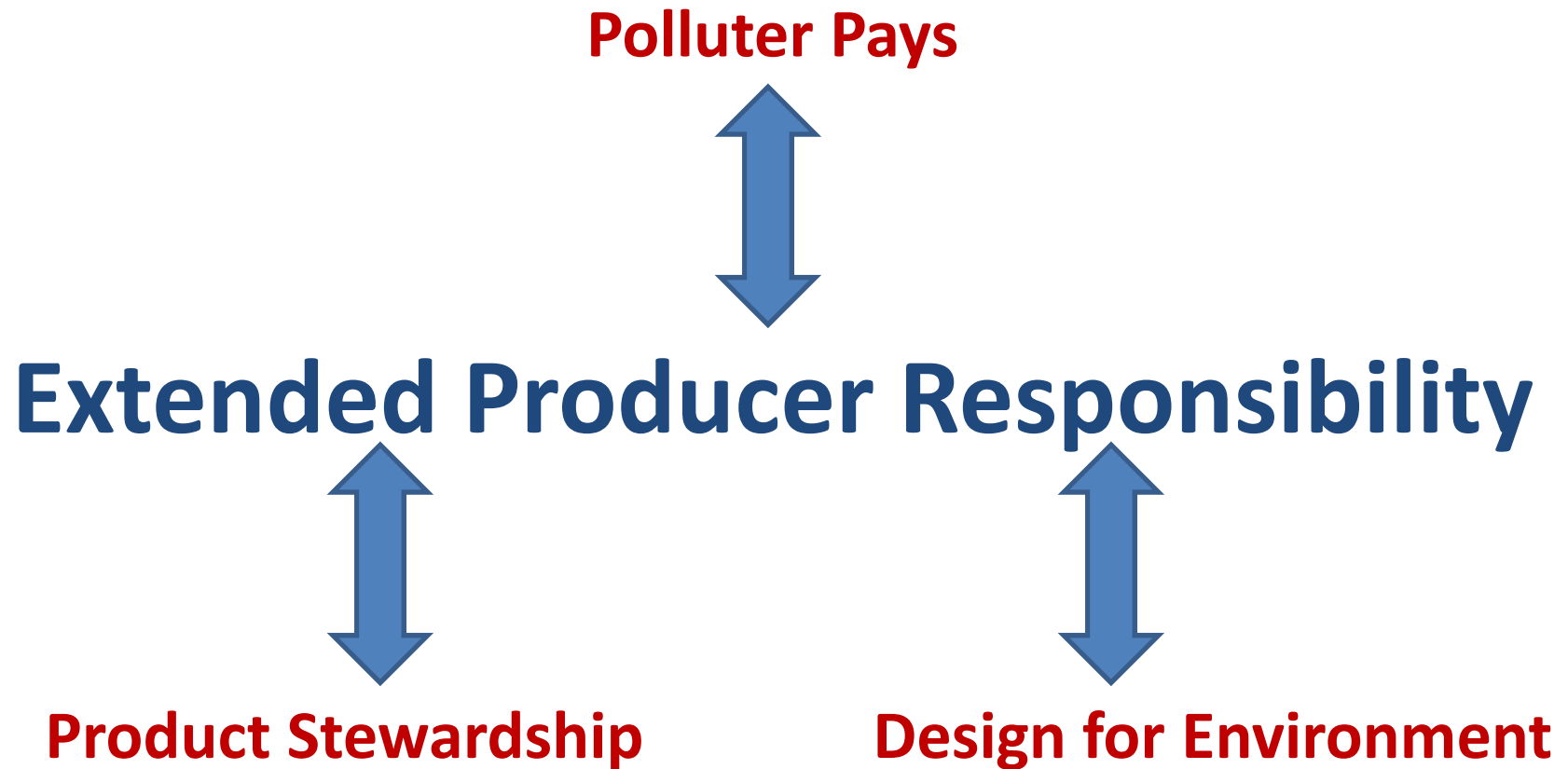


EPR Definition

- EPR is a policy principle to promote total life cycle environmental improvements of product systems by extending the responsibilities of the manufacturer of the product to various parts of the entire life cycle of the product, and especially to the take-back, recycling and final disposal of the product.

- Thomas Lindhqvist (2000)

Core Environmental Principles



EPR, Product Stewardship, and TPW

- Product stewardship (PS)
 - Sellers, restaurants, bars, and worksite responsibility
 - Mandatory take back and destruction (as with paint, pharmaceuticals, electronics)
 - Deposit-return scheme (as with bottles, cans)
- Design for environment
 - Ban sale of filtered cigarettes (such as with self-extinguishing cigarettes)
- Polluter pays
 - Litter fees
 - Litigation

PS and EPR

Stewardship after manufacture and sales

- Businesses
 - Sellers
 - Bars and Restaurants as Facilitators of outdoor smoking
- Interventions to be tested:
 - Signage
 - Neighborhood bans
 - Disposal facilities
 - Penalties

EPR at end-of-life: Pharmaceuticals

- Alameda Safe Drug Disposal Ordinance
 - Primary responsibility for end-of-life product management on manufacturer;
- Prevents unintentional poisoning and improper disposal of products into water system.

Deposit-return Scheme or Buy-back

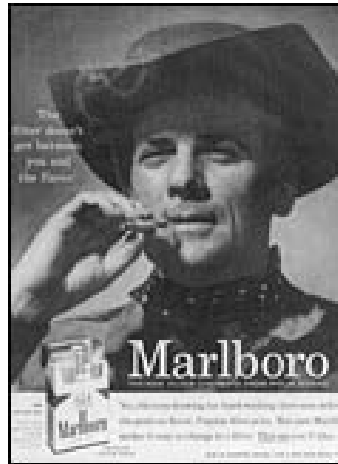
Examples of deposit return successes

- 1970s Oregon law credited with reducing litter and increasing container recycling,
 - Return rates up to 90%
 - Discarded items covered by laws were reduced from 40% of roadside waste to 6%
- Electronics (Australia and US)
- Cal Paint Take-back law: requires manufacturers to set up and administer a system to properly manage leftover paint.

Terracycle: unrecyclable products bought & upcycled

- Collects difficult-to-recycle trash: Plastic Lunchables, Capri Sun pouches, M&M wrappers, yogurt cups, etc.
- Major sponsorship of Santa Fe 'Natural' Tobacco Company (RJR)
- TPW used to create industrial products such as plastic pallets
- *Ships toxic waste via UPS and exposes its workers to hazardous materials*

Design for the Environment: Ban Filters



Kent Micronite
Filter: Asbestos!

Filter Farce: Light and Low Tar

And now....e-cigarettes!



Is this a crazy idea?

- **Filters have no health benefit**
- **They accumulate in storm water**
- **They are toxic to the environment**
- **They encourage people to start smoking and avoid quitting**
- **They are non-biodegradable cellulose acetate (plastic)**
- **65% of cigarettes disposed of improperly**

Cigarette butts & the tobacco industry (Secret Documents)

Industry feared the litter problem

- Tobacco control - “green” alliance
- Regulations making them responsible
- Regulations on the product

Industry fears being held responsible for butt waste:

- Can not question smoking
- Can not criticize smokers
- Fears fines/fees for clean-up, “Take back” laws, or recyclability requirements

The Industry's Main Response

- Educate smokers ('accommodation')
- Pocket ashtrays
- Provide outdoor ashtrays and receptacles
- Sponsor anti-litter campaigns



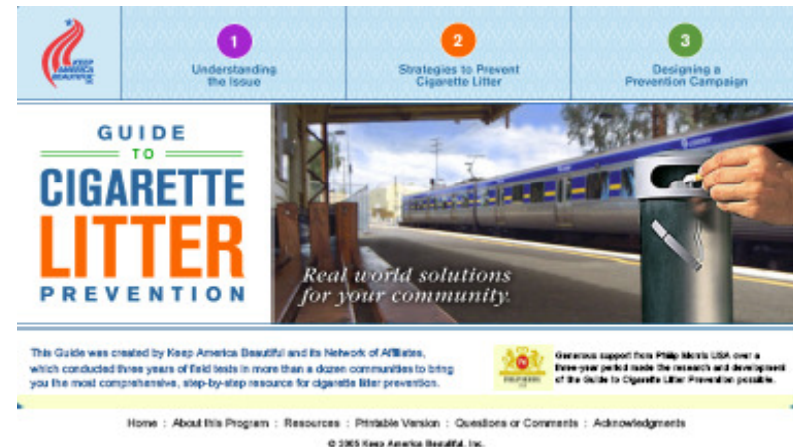
*For '...adults over 21 who have been
brainwashed with environmental propaganda'*

-from "The Future of RJR Litter Initiatives" in 1996 (ard97c00)

Tobacco Industry Corporate Social Responsibility (CSR)

- Altria funds 29 US Environmental Groups
 - The Nature Conservancy
 - National Fish and Wildlife Foundation
 - Ocean Conservancy
 - American Rivers
 - Rainforest Alliance

- Keep America Beautiful



Generous support from Philip Morris USA over a three-year period made the research and development of the Guide to Cigarette Litter Prevention possible.



CSR

- CSR is pro-active, voluntary commitment process to address responsibility through company's actions, encouraging positive initiatives affecting environment, consumers, employees, social norms, communities and other stakeholders.
- Tobacco industry has twisted CSR concept by “distorting science, wielding political influence, deploying financial tactics, influencing legal and regulatory actions, promoting their own products and services, and investing heavily in public relations.”

The Costs of Tobacco Product Litter: Calculating Costs and Abatement Fees in San Francisco



**John E. Schneider, PhD
Oxford Outcomes, Inc.**

Maximum Permissible Fee

Calculation of Per-Pack Maximum Permissible Fee

Measure	Estimate
Cigarette Packs Purchased in SF (2008)	30,611,026
Total Litter Mitigation Costs (2009) ^a	\$7,487,916
Total Litter Mitigation Costs Adjusted for In-migration (2009) ^b	\$6,649,270
Total Litter Mitigation Costs per Pack (2009)	\$0.22

Sources and Notes: (a) from Table 2 Column [4]; (b) assumes commuter and tourist visitors to San Francisco purchase 50% of their cigarettes outside of San Francisco, resulting in an 11.2% reduction in mitigation costs associated with TPL purchased within the boundaries of the City.

Litigation

- Basis:
 - Public nuisance and prevention of access to pristine natural environments
 - Recover economic costs of cleanups
 - Violation of federal Resource Conservation and Recovery Act
 - Application of California Hazardous Waste Laws
- Previous multi-state agreement (MSA) with tobacco industry involved health care costs only (\$287 billion)
 - Disclosures were extremely damaging to industry
 - Pre-empted more class action suits but not individual suits
 - Does not apply to environmental impacts

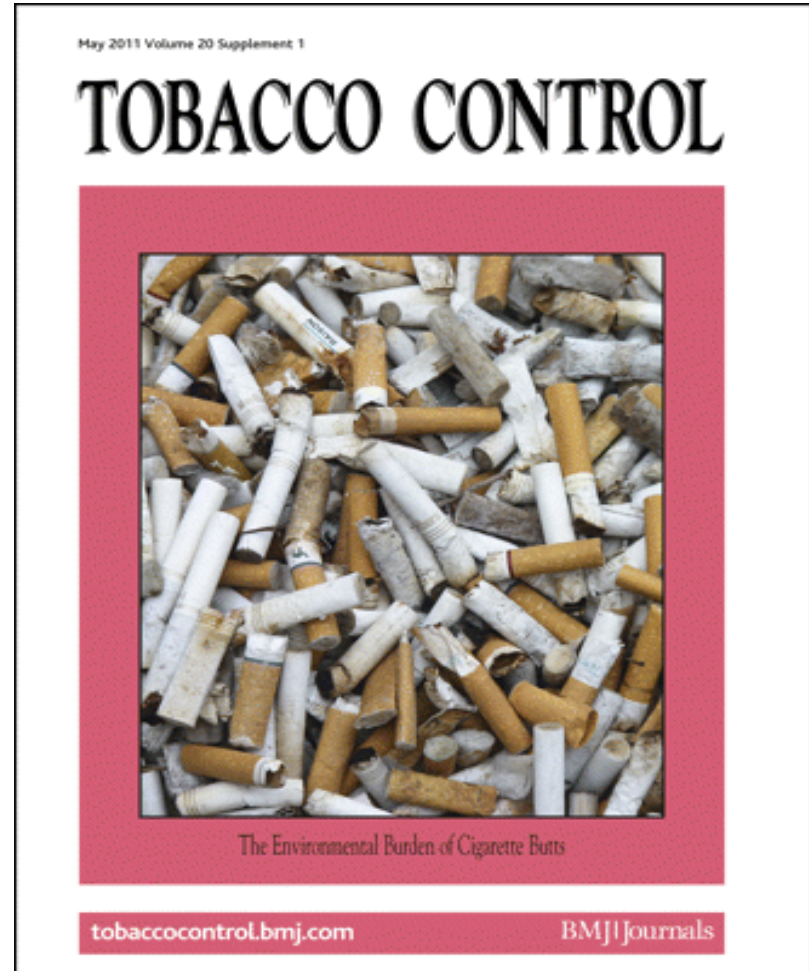
Conclusions



- Cigarette butts are toxic, mostly non-biodegradable waste
- The tobacco industry, retailers, and other beneficiaries of smoking should assume EPR and PS for TPW in the environment
- Local action critically important in raising awareness of this new tobacco control approach
- Policy options require more research

CBPP Activities So Far

- Special Issue of Journal, Tobacco Control
- Legacy Foundation Webinar April 2011
- <http://www.facebook.com/video/video.php?v=10150221525048973>
- Campus cleanups, community outreach
- Research on EPR
- State Butt Summit 3/8-3/9/2012



Plans for 2013-14

- Publish six papers
 - EPR/PS
 - Litigation strategies
 - Regulatory strategies (including FDA)
 - Economic analysis (Life-cycle)
 - International opportunities under FCTC
 - Tobacco industry influence on environmental policy and groups
- New TRDRP Grant: Litigation group, Model Law development, strengthen partnerships with environmental groups, additional scientific research on environmental hazards

New Scientific Research Proposals

- Identification of specific lethal chemicals in butt waste leachates
- Identification of TPW marker in runoff, storm drain water, surface water
- Determine potential for food chain entry of TPW toxins through bioamplification and bioaccumulation

Your Thoughts?

www.cigwaste.org

